

ABSTRACT

An improved data telemetry system for multi-conductor wirelines to achieve satisfactory transmission of analog and digital signals with frequency content up to 100 kHz by assigning at least two conductors to a first terminal
5 of a data transmittal means and to a first terminal of a data receiver means and connecting at least one additional conductor to a second terminal of a data transmittal means and to a second terminal of a data receiver means. Pairing conductors reduces attenuation and crosstalk and permits the signal to contain multiple frequency modulated carrier bands with individual channel
10 bandwidths of up to 3 kHz or higher.

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